# EXHIBIT A

| Product | Cat. No. | Size | Quantity | Price |
|---|---|---|---|---|
| **20X SSC** | 15557-044 | 1 L | — | $ 22.00 |
| | 15557-036 | 4 L | — | 66.00 |
| | 15557-028 | 10 L | — | 155.00 |

20X SSC (Ultra Pure) is a solution formulated for use in nucleic acid hybridizations and blot transfer applications. It is used in concentrations ranging from 0.2X to 20X, depending on the application. Supplied in 1-L plastic bottles, or in a 4-L or 10-L stackable CUBITAINER® Box, 20X SSC contains 3.0 M NaCl and 0.3 M sodium citrate, at pH 7.0.

**Analytical Specifications**

| | |
|---|---|
| pH of 20X SSC at 23°C | 7.0 ± 0.1 |
| specific conductance of 20X SSC at 23°C | 170 ± 10 mS/cm |

**Performance and quality testing:** No detectable contaminating activity is observed in DNA nicking and ribonuclease assays.

**Recommended storage condition:** 15°C to 30°C.

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| | | | | |
|---|---|---|---|---|
| **20X SSPE** | 15591-043 | 1 L | — | $ 27.00 |
| | 15591-035 | 4 L | — | 81.00 |
| | 15591-027 | 10 L | — | 189.00 |

20X SSPE (Ultra Pure) is a prepared buffer concentrate formulated for use in nucleic acid hybridizations and blot transfer applications. Supplied in 1-L plastic bottles, or in a 4-L or 10-L stackable CUBITAINER® Box, 20X SSPE contains 3.0 M NaCl, 0.2 M $NaH_2PO_4$, and 0.02 M EDTA, at pH 7.4.

**Analytical Specifications**

| | |
|---|---|
| pH of 20X SSPE at 25°C | 7.4 ± 0.1 |
| specific conductance of 20X SSPE at 25°C | 180 ± 10 mS/cm |

**Performance and quality testing:** No detectable contaminating activity is observed in DNA nicking and ribonuclease assays.

**Recommended storage condition:** 15°C to 30°C.

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| | | | | |
|---|---|---|---|---|
| **Streptavidin Agarose** | 15942-014 | 5 ml | — | $195.00 |

For additional information about this product, please refer to page 14–9.

| | | | | |
|---|---|---|---|---|
| **Sucrose** | 15503-014 | 1 kg | — | $25.00 |
| | 15503-022 | 5 kg | — | 69.00 |

Sucrose (Ultra Pure) is suitable for forming density gradients for a variety of separation applications. It is used to separate RNAs, to prepare bacteriophage λ DNA arms, and to separate proteins. Sucrose gradients typically are formed by use of gradient formers or by layering two or more sucrose solutions in varying amounts in a centrifuge tube.

**Analytical Specifications**

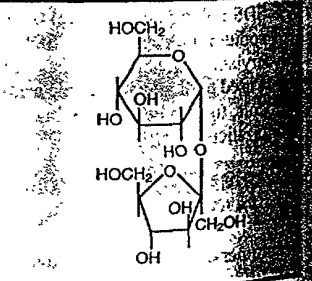
| | |
|---|---|
| molecular weight | 342.30 |
| appearance | white, free-flowing crystals or powder |
| purity | ≥99.9% |
| insolubles in a 50% (w/v) solution | none detected |
| lead | ≤8 ppm |
| free glucose | ≤0.1% |

**Performance and quality testing:** No detectable contaminating activity is observed in protease assays.

**Recommended storage condition:** 15°C to 30°C, dry.

**See also:**
Gradient Formers, *page 28-15.*

**Sucrose**




*These products are for laboratory research use only and are not intended for human or animal diagnostic, therapeutic, or other clinical uses, unless otherwise stated.*

# EXHIBIT B

c. *Harsh treatment:* Pour several hundred milliliters of boiling 0.1% SDS onto the membrane. Cool to room temperature.

*If a membrane is to be reprobed, it must not be allowed to dry out between hybridization and stripping. If it becomes dry, the probe may bind to the matrix.*

2. Place membrane on a sheet of dry Whatman 3MM filter paper and blot excess liquid with a second sheet. Wrap the membrane in plastic wrap and set up an autoradiograph.

*If signal is still seen after autoradiography, rewash using harsher conditions.*

3. The membrane can now be rehybridized. Alternatively, it can be dried and stored for later use.

*Membranes can be stored dry between Whatman 3MM paper for several months at room temperature. For long-term storage, place the membranes in a desiccator at room temperature or 4°C.*

## REAGENTS AND SOLUTIONS

*Aqueous prehybridization/hybridization (APH) solution*

5× SSC (*APPENDIX 2*)
5× Denhardt solution (*APPENDIX 2*)
1% (w/v) SDS

Add 100 μg/ml denatured salmon sperm DNA (see below) just before use

*Alternatives to Denhardt solution and denatured salmon sperm DNA as blocking agents are listed in Table 2.10.5 (see discussion in critical parameters).*

*Denatured salmon sperm DNA*

Dissolve 10 mg Sigma type III salmon sperm DNA (sodium salt) in 1 ml water. Pass vigorously through a 17-G needle 20 times to shear the DNA. Place in a boiling water bath for 10 min, then chill. Use immediately or store at −20°C in small aliquots. If stored, reheat to 100°C for 5 min and chill on ice immediately before using.

*Formamide prehybridization/hybridization (FPH) solution*

5× SSC (*APPENDIX 2*)
5× Denhardt solution (*APPENDIX 2*)
50% (w/v) formamide
1% (w/v) SDS

Add 100 μg/ml denatured salmon sperm DNA (see above) just before use

*Alternatives to Denhardt solution and denatured salmon sperm DNA as blocking agents are listed in Table 2.10.5 (see discussion in critical parameters).*

*Commercial formamide is usually satisfactory for use. If the liquid has a yellow color, deionize as follows: add 5 g of mixed-bed ion-exchange resin [e.g., Bio-Rad AG 501-X8 or 501-X8(D) resins] per 100 ml formamide, stir at room temperature for 1 hr, and filter through Whatman no. 1 paper.*

CAUTION: *Formamide is a teratogen. Handle with care.*

*Labeling buffer*

200 mM Tris·Cl, pH 7.5
30 mM $MgCl_2$
10 mM spermidine

*Mild stripping solution*

5 mM Tris·Cl, pH 8.0
2 mM EDTA
0.1× Denhardt solution (*APPENDIX 2*)

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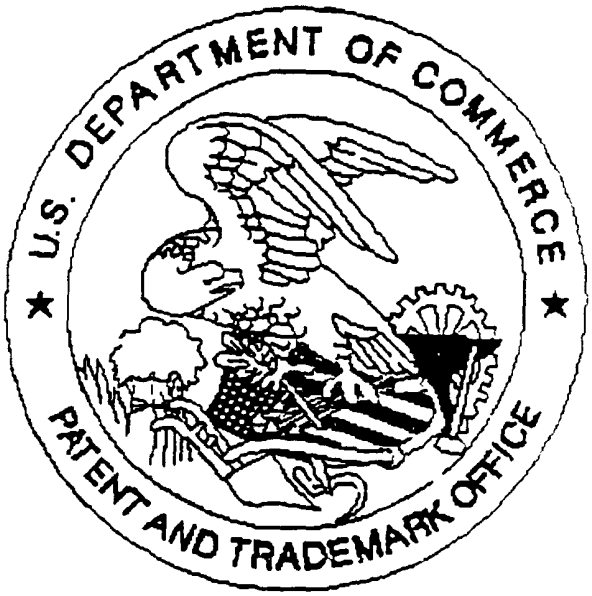


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